B Circular

NOTES and Correspondence

MYSORE GOVERNMENT SECRETARIAT

File No. PWD 61 MGL 60

Department of Public Works

Section Major Irrigation.

Subject: Soil Conservation in River Valley Projects.

References:

Date	To whom sent	Notes and instructions
Gopalakrishnaiah 6/1/61		
4/1/61		Im

4776
A & F 2

G. F. 7]

GOVERNMENT OF COORG

..... File No. R Dé 53/56

Serial No.....

195

(1)

Month and year of Record.....195

SUBJECT

Soil Conservation in River Valley Projects -

Previous References	Later References
R Dé. 166/54.	
Note sheet pages - 1 to 4	
Current file pages - 1 to 88	

P.W.D. 3 2/7

MYSORE GOVERNMENT SECRETARIAT NO. 5949/E JUL 1960 FOREST BRANCH

MYSORE ... NO. 6217 - 7 ... PUBLIC WORKS MAJOR IRRIGATION BRANCH

SECRETARY TO GOVERNMENT NO. D 3320 1960 PUBLIC WORKS & ELEC. DEPTT.

This will be sent to General Records if approved

CKR 10/7 Yes 6/7

4/7 Yes CKR. 7/60.

B CAR 13/7

P.U.C. | Letter no. SCS/A-2/174/dt 4-6-56 from Secy Soil Conservation Society. Bihar

A Copy of the important resolutions adopted at the Fourth Annual Session of the Soil Conservation Society held at Patiala on 26th to 28th Dec! 55, has been forwaded for consideration. A Copy of the resolution may be forwarded to A-O-f C.O.7. for their information after perusal.

2 The P.U.C. is submitted for perusal:

Clk 12/9/56.

G.S. 12/9/56

12/9

3 CM 19.6.56

21/6

Record

P U C. | Letter no. SCS/A-2/32/dt 31-8-56 from Secy. Soil Cons. Board.

4 It has been intimated that the Soil Conservation meeting will be held in Lucknow between 26th and 29th of Nov. 1956 and requests that the action taken on the resolutions may be reported. Reports from A-O-f C.O.7. is awaited.

5 The P-U-C. is submitted for perusal. Reminder Note.

G.S. Clk 7/9/56 7/9/56 7/9/56

M

P. U. C. | letter no. C-2-923/56 | dt. 31-7-56 from C.O.T. Coorg.

The Ministry of Food and Agriculture in their letter no. 7.17-10/56-DS (VI) dt 7-6-56 has suggested that the Forest Deptt. should undertake Contour bunding while planting trees so that pastures could be developed simultaneously and trees should be planted in such a way, as will not damage the pastures. It has been requested to intimate the progress made in this regard.

The C.O.T. who was consulted on the subject, says that there is no scope for the development of pasture within the reserved forests. Further, adequate pasture is available in the reserved forests for the local cattle, as such it is not necessary to take any further action on the matter.

If approved the Ministry of Food and Agri. may be intimated on the lines of C.O.T. For orders.

Subject to approval draft put up.

CM
31/8/56.
31/8/56

For personal inspection.

24.9.56.

1964

G.S.

Seen by Minister & C.M. 1/10/56.

CM

SOIL CONSERVATION SOCIETY OF INDIA

COORG GOVERNMENT SECRETARIAT. 11 JUN 1956

HAZARIBAGH
BIHAR, INDIA.

No.SCS/A-2/174

The 4th June, 1956.

To
The Chief Secretary,
Govt. of Coorg,
MARCARA.

Dear Sir,

I forward a copy of the important resolutions adopted at the Fourth Annual Session of the Soil Conservation Society of India held at Patiala on 26th to 28th December, 1955 for the promotion of soil and water conservation in India. The Society would be grateful if you would bring this resolution to the notice of the Ministries concerned of the State Government for their consideration.

Yours faithfully,

(S. S. Pillai)
SECRETARY

DESPATCHED.

No. B-7382
Soils 55/56.

11th Sept 56

with a copy of the enclosure
Copy forwarded to the.
C.O.T. & A.O. for remarks
not later than 10th October 56.

for Secy to Govt

APPENDIX - C.

Resolutions passed at the Fourth Annual General Meeting of the Soil Conservation Society of India at Patiala.

1. The Soil Conservation Society is glad to learn that some progress has been made by the Survey Committee set up last year although the work is not yet complete and requests the Committee to expedite the completion of their work.

2. As standardisation of the Soil Conservation terminologyis essential for a common understanding the Soil Conservation Board be requested to define the general terms at an early date and to ensure that the terminology of particular techniques is similarly laid down in due course.

3. The Soil Conservation Society feels the increasing importance of grasses in soil conservation and for cattle feed requirements and therefore recommends

(i) That the Central and State Government organisations be requested to intensify research on grasses, specially the droughts resisting ones and to multiply the seeds of promising types for distribution.

(ii) That State Governments be requested to organise demonstration pilot projects for controlled grazing in village grasslands in collaboration with the farmers through their village Panchayats.

4. In view of large scale reclamation works being done in different States and in view of the lack of data on these projects at one place for the reference of the interested persons the Society feels that it will be worthwhile to collect this data in a standard statement form and publish it in the Journal. It is, therefore, resolved that the Central Soil Conservation Board be requested to take up this work in consultation with the various States and organisations and secure its publication.

5. It is resolved that agronomic research in soil conservation should be taken up at the important research stations.

6. The Soil Conservation Society of India resolved that the recommendation of the last meeting regarding role of forestry and afforestation in relation to soil conservation be reiterated in their successful implementation. The recommendations are reproduced below :

It recognized the importance of afforestation techniques with a view not only to rehabilitating and protecting eroded land but also to augmenting local wood supply so as to enable the use of farmyard manure for building up soil fertility. The problem of afforestation presents various difficulties in different tracts and under different degrees of erosion. A great deal of experience has been gained in this work in many States - but it was considered that further research should be undertaken in this difficult field of forestry, wherever necessary. The Society, therefore, recommends :

(Contd....2)

(i) That the Central Soil Conservation Board should compile existing information on the costs and techniques of afforestation of bare and eroded lands and publish it at an early date.

(ii) It further recommends that interested State Governments should undertake a programme of research in afforestation of various types of eroded lands with a view to establishing the best and cheapest techniques. The Society, would, however, strongly, urge that the work of afforestation of eroded land should be pursued with vigour on the basis of existing information and should not be held up pending the completion of the proposed research programme. This Society trusts that the Government of India will give adequate financial assistance to State Governments to enable them to give effect to the resolution.

(iii) The Society further recommends that the Union and State Governments should sponsor a Statewide scheme of raising village plantations on compact blocks of available land with a view to increasing local wood supply and diverting farmyad manure to the fields.

(iv) The Society urges the Central Soil Conservation Board to make arrangements for the measurement collection and publication of Hydrological data relating to forest and grasslands.

7(i) It is resolved that in view of the increasing importance of soil conservation in community development, the States Governments be requested to start pilot projects in the diffe - rent regions of the States in collaboration with the State Community Administration. The Society also recommends :

(ii) That rural sociologists be associated with this work in the States to find out cultural hinderances that stand in the way of progress and to conduct research on the methods of overcoming them.

(iii) That the Central and State Governments be requested to give full recognition to the efforts of the villagers individually and collectively and to award suitable prizes to villagers or villages whose farms have been planned on sound soil conservation principles.

(iv) That the Central and State Governments be requested to take steps for the early inclusion of the subject of soil conservation in the curricula of the agricultural colleges, Social Education training centres, Extension Training Centres and of the Secondary Schools.

8. In view of the fact that a large sum of money is allocated to each State for flood control measures, the Society recommends that the Central Flood Control Board be requested to include soil conservation measures in their programmes flood control measures.

(Contd.....3)

9. This meeting of the Soil Conservation Society of India requests all the State Governments that where schemes for the consolidation of land-holding and for land reclamation for colonisation are being taken up, attention should be paid to see that the allocation of plots are made strictly according to the principles of contour so as to ensure proper conservation of soil and water and to maintain the fertility of the soil.

10. The Society notes with gratitude that soil conservation has found a significant place in the Second Five Year Plan and that a considerable sum of money is proposed to be allotted for this purpose.

11. The Society resolves that sufficient time be allotted for discussion of the main features of State Soil Conservation Schemes included in the Second Five Year Plan during the next annual session of the Society.

12. The Society resolves at its Fourth Annual General Meeting to place on record its deep sense of gratitude to the Government of PEPSU for having granted a sum of Rs. 1500/- to the Society for holding its Fourth Annual Session at Patiala.

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S. C. 9

Letter No.SCS/A-2/174, dated the 4th June, 1956,from Shri. S. S. Pillai, Secretary to the Soil Conservation Society of India, Hazaribagh, Bihar, India, to the Chief Secretary to the Government of Coorg, Mercara.

...

I forward a copy of the important resolutions adopted at the Fourth Annual Session of the Soil Conservation Society of India held at Patiala on the 26th to 28th December, 1955 for the promotion of soil and water conservation in India. The Society would be grateful if you would bring this resolution to the notice of the Ministries concerned of the State Government for their consideration.

....

GOVERNMENT OF COORG
GENERAL DEPARTMENT II.

No.B./7382/
Soils/56.

MERCARA,the 11th September, 1956.

Copy with a copy of the enclosure forwarded to the Conservator of Forests, and the Agricultural Officer, for remarks, not later than 10th October, 1956.

N. N. [illegible] 12/9/56

for SECRETARY TO GOVERNMENT,
GENERAL DEPARTMENT II.

GA/14-9'

APPENDIX - Q.

Resolutions passed at the Fourth Annual General Meeting of the Soil Conservation Society of India at Patiala.

1. The Soil Conservation Society is glad to learn that some progress has been made by the Survey Committee set up last year although the work is not yet complete and requests the Committee to expedite the completion of their work.

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(i) That the Central and State Government organisations be requested to intensify research on grasses, specially the droughts resisting ones and to multiply the seeds of promising types for distribution.

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4. In view of large scale reclamation works being done in different States and in view of the lack of data on these projects at one place for the reference of the interested persons the Society feels that it will be worthwhile to collect this data in a standard statement form and publish it in the Journal. It is therefore, resolved that the Central Soil Conservation Board be requested to take up this work in consultation with the various States and organisations and secure its publication.

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(i) That the Central Soil Conservation Board should compile existing information on the costs and techniques of afforestation of bare and eroded lands and publish it at an early date.

(ii) It further recommends that interested State Governments should undertake a programme of research in afforestation of various types of eroded lands with a view to establishing the best and cheapest techniques. The Society, would, however, strongly, urge that the work of afforestation of eroded land should be pursued with vigour on the basis of existing information and should not be held up pending the completion of the proposed research programme. This Society trusts that the Government of India will give adequate financial assistance to State Governments to enable them to give effect to the resolution.

(iii) The Society further recommends that the Union and State Governments should sponsor a Statewide scheme of raising village plantations on compact blocks of available land with a view to increasing local wood supply and diverting farmyard manure to the fields.

(iv) The Society urges the Central Soil Conservation Board to make arrangements for the measurement collection and publication of Hydrological data relating to forest and grasslands.

7. (i) It is resolved that in view of the increasing importance of soil conservation in Community Development, the States Governments be requested to start pilot projects in the different regions of the States in collaboration with the State Community Administration. The Society also recommends:

(ii) That rural sociologists be associated with this work in the States to find out cultural hinderances that stand in the way of progress and to conduct research on the methods of overcoming them.

(iii) That the Central and State Governments be requested to give full recognition to the efforts of the villagers individually and collectively and to award suitable prizes to villagers or villages whose farms have been planned on sound soil conservation principles.

(iv) That the Central and State Governments be requested to take steps for the early inclusion of the subject of soil conservation in the curricula of the agricultural colleges, Social Education training centres, Extension Training Centres and of the Secondary Schools.

8. In view of the fact that a large sum of money is allocated to each State for flood control measures, the Society recommends that the Central Flood Control Board be requested to include soil conservation measures in their programmes flood control measures.

9. This meeting of the Soil Conservation Society of India requests all the State Governments that where schemes for the consolidation of land-holding and for land reclamation for colonisation are being taken up, attention should be paid to see that the allocation of plots are made strictly according to the principles of contour so as to ensure proper conservation of soil and water and to maintain the fertility of the soil.

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10. The Society notes with gratitude that soil conservation has found a significant place in the Second Five Year Plan and that a considerable sum of money is proposed to be allotted for this purpose.

11. The Society resolves that sufficient time be allotted for discussion of the main features of State Soil Conservation Schemes included in the Second Five Year Plan during the next annual session of the Society.

12. The Society resolves at its Fourth Annual General Meeting to place on record its deep sense of gratitude to the Government of PEPSU for having granted a sum of Rs.1.500/- to the Society for holding its Fourth Annual Session at Patiala.

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GA/14-9'

SOIL CONSERVATION SOCIETY OF INDIA

HAZARIBAGH,
BIHAR, INDIA.

No.SCS/A-2/32, 28.8. 1956.

CIRCULAR LETTER

To
The Chief Secretary,
Government of Coorg
Mysore

Dear Sir,

Kindly refer to my letter No.SCS/A-2/174 dated 4.6.56 together with a copy of resolutions adopted at the Fourth Annual Session of the Soil Conservation Society of India held at Patiala in December, 1955.

The next annual General Meeting of the Society is due to take place in Lucknow between 26th and 29th of November 1956 and am most anxious to have particulars and actions taken on the resolutions in the various departments of your State so that they may be discussed and placed before the meeting in November, 1956.

I shall be extremely grateful if these reports could be made available to me before the 31st of October, 1956.

remarks from A.C. for C.O.7 awaited.

Yours faithfully,

(S. S. Pillai) 31/8
SECRETARY

[illegible]

No.6032/1-21 1915.

CIRCULAR.

To the Chief Secretary,
[illegible] of

Sir,

I am directed to request that you will be good enough to bring to the notice of the Government the following Resolution of the Bombay Annual Session of the Indian National Congress, held in December 1915:-

The next annual Session of the Indian National Congress be held in Bombay in December 1916 and the Subject Committee be requested to have a meeting in Bombay on the 25th and 26th of November 1916 and to frame resolutions on the questions to be discussed at the Session.

Proposed topics for discussion, viz.,

1. [illegible] draft to entirely prohibit [illegible] could be made available to me before the 31st October 1916.

I have the honour to be,
Sir,
Your most obedient,
Servant,

(Sd.) S. Patel.
SECRETARY.

EXPRESS LETTER

F.21-52/55-Soil Cons.,
Government of India.,
Ministry of Food & Agriculture,
New Delhi, dated June '56.

To

All the State Governments.

SUBJECT: SOIL CONSERVATION IN RIVER VALLEY PROJECTS.

The subject of soil conservation measures in river valley projects has been under the consideration of the Central Water & Power Commission since its inception and a certain amount of work has already been carried out in the river valley projects which have been executed or are under execution in the various States. Owing to the absence of a special organisation for the purpose, however, the work could not be undertaken by the Commission to the extent desired. The subject has been considered also by the Central Soil Conservation Board set up by the Ministry of Food & Agriculture and the Standing Committee of the Board on which the Commission is represented. In view of the fact that the formulation and execution of soil conservation schemes, including those in river valley projects, for under the Central Soil Cons.Board & that has already provided have been provided adequate funds for such work it is now considered necessary to demarcate clearly the respective functions of the River Valley Projects, the State Governments, the C.P.A. and the Central Soil Conservation Board in regard to this activity in order that schemes for soil conservation in such projects are properly and expeditiously drawn up and executed.

2- The various problems involved in this connection and the manner in which they are to be tackled were considered at a meeting of the Sub-Committee on soil conservation in River Valley Projects under the C.W.P.C. in July '54. A copy of the report of the Sub-Committee, together with a copy of the Review prepared by the Commission for the Engineering Seminar held at Roorki in July '54, is enclosed for information. It will be observed that the following will be the broad lines on which action should be taken in connection with the formulation and execution of such schemes:

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(i) It will be essential to undertake countrywide erosion surveys for implementing effective soil conservation measures. These surveys will be carried out by the States concerned or by the Central Soil Conservation Board through its own agency. The assessment of the nature and extent or erosion can best be made by a rapid survey of the reconnaisance type by which major erosion affected areas are demarcated and types and degrees of erosion in each area broadly indicated. One or more areas of suitable size should be selected for demonstration and development work, preference being given to the areas by catchments of sub-catchments which are representative of much larger regions suffering from erosion, so that the experience gained in these would be applicable to larger areas.

(ii) The above pilot survey should include study of the soils, the slopes of the country as well as the streams, the extent of the erosion, the vegetal cover, the present land use, the silt content of streams and possible sites for check-dams, livestock and agricultural practices and their contribution to erosion, hydro-metereological data and other relevant information.

(iii) With a view to ensuring uniformity and completeness, it would be necessary that the surveys be undertaken and details decided jointly by Engineers, Agriculturists and Forest Authorities in the area, keeping in view the data already available with different departments and with a view to avoid duplication of work.

(iv) The River Valley Project Administrations would explore the possibilities for the construction of check-dams above the dam sites as measures for silt reduction and, prolongation of the useful life of the projects. The provision for this will be met from the project estimates of that Administration.

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3- The relative functions of the River Valley authorities the Community Project Administration, State Governments and the Central Soil Conservation Board have been clearly brought out in the minutes of the Sub-Committee. In pursuance of the recommendations of the Sub-Committee, the State Governments have already been requested to have a representative of the River Valley Projects in the States of their respective Soil Conservation Boards and a model Bill for enactment of legislation or amendment to existing legislation for implementing soil conservation measures has already been circulated by this Ministry.

4- In the Second Five-Year Plan period, it is expected that there will be a provision of about Rs. 334 lakhs for the execution of soil conservation schemes in the River Valley Projects. Such Schemes are eligible for subsidies and loans in accordance with the general principles already communicated to the State Governments with this Ministry Express Letter No.F.3-13/55-Soil Cons., dated the 29th Feb.'56.

5- In view of the importance of the problems and the urgency of taking up such work particularly in the upper catchments of the rivers on which dams are under construction, the Government of India will be glad if action can be initiated immediately in the manner set forth in paragraph 2 above detailed schemes are formulated as suggested, for the consideration of the Govt. of India. While forwarding the schemes, it is requested that the latest available information regarding the soil conservation work done so far in such areas and that proposed to be done may also kindly be furnished.

6- The receipt of this letter may please be acklowledged.

Yours faithfully,

(B.D. Kapur)
'Malhotra' Under Secretary to the Govt. of India.

Encls: As above.
(with five spare copies)

.....p.t.o.

Copy together with a copy of the following papers, forwarded to the Ministry of Irrigation & Power, with reference to their U.O.No.H-114(158), dated 27th Aug.'55:-

1) Model Bill referred to in para 3 above, and
2) this Ministry's Express letter No.F.3-13/55-Soil Cons., dated the 29th Feb.'56, referred to in para 4 above.

BY ORDER

(B.D. Kapur)
Under Secretary...

Report of the sub-committee on soil conservation in river valley projects.

A meeting of the sub-committee was held on 20th July '54. The following attended:-

1. Shri M.D. Mithal, Member (P.& I.)C.W.P.C.Chairman.
2. Shri K.K. Kartha, C.E.(PWD) Travancore-Cochin.
3. Shri A.L. Das, Deputy Chief Engineer, D.V.C.
4. Shri R.L. Khanna, Director Inspection and Control Bhakra Dam, Nangal Township.
5. Shri R.P. Verma, S.E., Hirakud Dam Project.
6. Shri P.R. Ahuja, S.E. In-charge of the Directorate of Hydrology & Statistics,C.W.P.C.

The Central Water & Power Commission has prepared a note bringing out the points for discussion on "Soil Conservation in River Valley Projects".

The items mentioned below are those included in the note "Points for discussion" prepared by the Committee of coordination of Engineers - 18-7-1954. The views of the Committee on these points are given below:-

Item No.I: In view of the fact that countrywide erosion surveys are essential for implementing effective soil conservation measures, by whom and how should these surveys may be conducted ?

The Sub-Committee feels that country-wide erosion surveys are essential for implementing effective soil conservation measures and that they should be carried out by the States concerned. The Sub-Committee understands that the States are forming Soil Conservation Boards for this purpose.

The assessment of the nature and extent of erosion can best be made by a rapid survey of the reconnaissance type by which major erosion affected areas are demarcated and the types and degrees of erosion in each area broadly indicated.

One or more areas of suitable size should be selected for work during the period of the plan.

Preference should be given in making this

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selection to areas, by catchments or sub-catchments, which are representative of much larger regions suffering from erosion so that the experience gained in these would be applicable to larger areas.

It will be the function of the Central Soil Conservation Board to standardise the scientific nomenclature survey techniques, etc. for these surveys.

Item No.2:- In as much as surveys of the entire catchment areas appear too huge to be undertaken in the near future, what type of pilot surveys should be conducted by the State Govts. and in what manner so as to draw inferences applicable to the entire catchment on the basis of small scale surveys ?

The pilot survey should include study of the soils, the slopes of the country as well as of the streams, the extent of the erosion, the vegetal cover, the present land use, silt content of streams and possible sites for check dams, livestock and agricultural practices and their contribution to erosion, hydro-meterological data and other relevant important information.

It is suggested for uniformity and completeness that the surveys be undertaken and details decided jointly by engineers, agriculturists and forest authorities in the area.

Item No.3:- What steps should the Central Soil Cons. Board take to institute research on problems of quantitative extent of silt reduction likely to result from different types of conservation measures ?

The Central Soil Conservation Board should plan Research-cum-Demonstration Centres in representative areas and correlate results in order to apply them to actual field conditions.

The Board should also encourage the states to carry out such works independently or through project authorities, in as many catchments as possible.

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Item No.4:- If the river valley project authorities have to play a role in the field of soil conservation, what exactly is the nature, scope and extent of this role ? Should the project administrations confine their attention only to such engineering measures as the construction of check dams or should their jurisdiction embrace other fields like setting up demonstration farms or afforestation, contour bunding etc. ? Do not the latter more appropriately belong to the jurisdiction of respective departments of the different State Govts. like Agriculture, Forests etc. ?

River Valley Project Administrations should have the responsibility to explore the possibilities for the construction of check dams above the proposed dam sites, as measures for silt reduction and, in consequence, prolongation of the useful like of the projects.

Provision should be made for the preparation of such schemes in the project estimates. If it is visualised that within the construction period of the project, construction of the check dams will be necessary with other major works of the project, then the provision for such of the works should also be made in the project estimate. Nevertheless all the schemes should be discussed in the project report.

The project authorities should help the State authorities in the preparation of overall plans for the soil conservation measures in the catchment areas upstream of dams.

In order to popularise soil conservation measures, it would be desirable for the project authorities to encourage demonstration farms for land use and afforestation in the catchment area. It is appropriate that funds for these activities should come from the 5-Year Plan as distinct from project estimates.

Item No.5:- What should be the basis and extent of the provision for soil conservation in the estimates of river valley projects ?

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Where construction of check dams is considered necessary within the construction period of the project, provision should be made in the project estimate at 5 to 10% of the cost of the main dam, without waiting for detailed survey and estimates of these check dams; but no work is to be undertaken without obtaining separate sanctions for each of the works.

Regarding afforestation and other soil conservation measures in culturable areas or areas to be made culturable, separate provisions should be made in the Five Year Plans not chargeable to the project.

Item No.6:- What has been done so far in river valley projects for implementing soil conservation measures and what remains to be done ?

Item No.7:- What have been the major difficulties experienced in the past which prevented a more vigorous implementation of conservation measures in river valley projects ?

As broadly indicated on pages 2 to 14 of the note on 'Soil Conservation river valley projects' circulated by the C.W.P.C., some work in this direction has already been initiated.

However, much remains to be done.

The difficulties have been, lack of funds, absence of detailed schemes, organization and legislation for control of land use i.e., restricting, grazing, jhuming, etc.

Item No.8:-What should be the agency for the execution of suitable soil conservation measures in

(a) State Projects;
(b) Inter-state projects.

Item No.9:-What machinery is needed to ensure proper coordination and liaison between the soil conservation measures in river valley projects and those undertaken by the Central and State Govts. independent of them ?

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Item No.10:- What should be the responsibility between State Govts., Central and State Soil Cons. Board and the Project Administrations ?

In the case of state projects, the State Soil Conservation Boards will get the measures executed in collaboration with the river valley projects and the Comminity Project Administrations.

In the case of inter-state projects, the schemes will be prepared by the Project authorities but the work will be carried out by the State concerned under the general guidance of the Central Soil Conservation Board.

The States may use the project agencies for the execution of these measures by agreement.

During the period of execution of any river valley projects, check dams and other works in the stream would be carried out by the project authorities.

It is suggested that the State Soil Conservation Boards should include a representative of the river valley projects in that State.

The State Soil Cons. Boards will supply progress reports on various aspects of soil conservation measures to the Central Soil Conservation Board to ensure proper coordination and liaison between the soil conservation measures in the river valley projects and those undertaken by the Centra. & State Govts. independent of them.

Guidance will be given from time to time by the Central Soil Conservation Board to the State Soil Cons. Boards and project authorities, as and when considered necessary.

Item No. 11:- What legislation is necessary to ensure implementation of soil conservation measures by the State authorities ?

The Sub-committee has not before it the legislation bearing on soil conservation enacted by the various state authorities. Some states may have no such legislation. It will be necessary for each state to study the present

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conditions in this respect and to enact legislation necessary to ensure measures required for soil conservation and to enforce the same. These may include

1. Powers, where necessary, to enforce rotational closures to grazing, felling of trees etc.
2. Crop rotation.
3. Contour bunding and terracing.
4. Afforestation and no cultivation beyond a certain slope.
5. Carrying out works at the cost of the owners of land, where they fail to cooperate.

Item No.12:- The necessity of making community project authorities to undertake soil conservation measures alongwith their other activities.

It is recommanded that the Soil Conservation Boards may also impress the necessity of carrying out soil conservation measures on the Community Project Administrations in the areas being tackled by them.

SOIL CONSERVATION IN RIVER VALLEY PROJECTS.

SUMMARY

At the outset, the role of soil conservation in river valley projects is discussed, and it is pointed out that the importance of soil conservation, as far as river valley projects are concerned, arises out of the single but important benefit of reducing the sediment inflowinto reservoirs and like structures projected on rivers. The efforts so far made for initiating effective soil conservation measures in the Damodar Mahanadi, Kosi Bhakra, Nangal, Tawa, Tani, Mayurakshi and Chambal projects are briefly reviewed. The recommendations outlined in the 5-Year Plan in the field of soil conservation and the composition and the functions of the recently set up Central Soil Cons. Board are described.

In a discussion of the general aspects of the question, it is pointed out that finances for suitable schemes can be found in the project estimate of every river valley project or from out of the two crores provided in the current 5-Year Plan, lack of sufficient precision in the evaluation of the nature & magnitude of the problem and absence of quantitative conceptions about the possible reduction in the silt load of rivers consequential to the adoption of conservation measures are offered, among others, as possible reaons for the lack of desired progress in this field. The question of suitable agency for the execution of conservation measures is discussed and it is pointed out that only the construction of check dams for head water control should be considered the responsibility of engineering departments, while all other measures such as contour bunding, strip cropping , terracing, etc. should be viewed as developmental problems falling in the jurisdiction of other appropriate departments of the Central and State Govts.

Some defenite recommendations have been made towards the close of the paper, the more important of which are:-

i) country-wide erosion surveys should be initiated catchment-wise by the respective State Govts.

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ii) pilot surveys should be started in large size catchments.

iii) Research on the quantitative aspects of the beneficial effects of soil conservation measures should be instituted.

iv) A lump sum provision should be made in each river valley project estimate; and,

v) importance should be attached not only to conservation in the upstream reaches above the dam but also lower down in the commanded area.

The chapter on soil conservation in the 5-Year Plan & Govt. of India Resolution setting up the Central Soil Conservation Board, the proceedings of the meeting of the Board and its Standing Committee held so far and a bibliography of Indian Literature on soil conservation are enclosed as appendices for facility of discussion.

EXPRESS LETTER

No. F.21-52/55-Soil Cons.,
Government of India.,
Ministry of Food & Agriculture,

New Delhi, dated June '56.

GOVERNMENT SECRETARIAT
16 JUN 1956
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To all the State Governments.

SUBJECT: SOIL CONSERVATION IN RIVER VALLEY PROJECTS.

The subject of soil conservation measures in river valley projects has been under the consideration of the Central Water & Power Commission since its inception and a certain amount of work has already been carried out in the river valley projects which have been executed or are under execution in the various States. Owing to the absence of a special organisation for the purpose, however, the work could not be undertaken by the Commission to the extent desired. The subject has been considered also by the Central Soil Conservation Board set up by the Ministry of Food & Agriculture and the Standing Committee of the Board on which the Commission is represented. In view of the fact that the formulation and execution of soil conservation schemes, including those in river valley projects, have been provided for under the Central Soil Cons. Board & that adequate funds have already provided for such work it is now considered necessary to demarcate clearly the respective functions of the River Valley Projects, the State Governments, the C.P.A. and the Central Soil Conservation Board in regard to this activity in order that schemes for soil conservation in such projects are properly and expeditiously drawn up and executed.

2- The various problems involved in this connection and the manner in which they are to be tackled were considered at a meeting of the Sub-Committee on soil conservation in River Valley Projects under the C.W.P.C. in July '54. A copy of the report of the Sub-Committee, together with a copy of the Review prepared by the Commission for the Engineering Seminar held at Roorki in July '54, is enclosed for information. It will be observed that the following will be the broad lines on which action should be taken in connection with the formulation and execution of such schemes:

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(i) It will be essential to undertake countrywide erosion surveys for implementing effective soil conservation measures. These surveys will be carried out by the States concerned or by the Central Soil Conservation Board through its own agency. The asessment of the nature and extent or erosion can best be made by a rapid survey of the reconnaisance type by which major erosion affected areas are demarcated and types and degrees of erosion in each area broadly indicated. One or more areas of suitable size should be selected for demonstration and development work, preference being given to the areas by catchments of sub-catchments which are representative of much larger regions suffering from erosion, so that the experience gained in these would be applicable to larger areas.

(ii) The above pilot survey should include study of the soils, the slopes of the country as well as the streams, the extent of the erosion, the vegetal cover, the present land use, the silt content of streams and possible sites for check-dams, livestock and agricultural practices and their contribution to erosion, hydro-metereological data and other relevant information.

(iii) With a view to ensuring uniformity and completeness, it would be necessary that the surveys be undertaken and details decided jointly by Engineers, Agriculturists and Forest Authorities in the area, keeping in view the data already available with different departments and with a view to avoid duplication of work.

(iv) The River Valley Project Administrations would explore the possibilities for the construction of check-dams above the dam sites as measures for silt reduction and, prolongation of the useful life of the projects. The provision for this will be met from the project estimates of that Administration.

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3- The relative functions of the River Valley authorities the Community Project Administration, State Governments and the Central Soil Conservation Board have been clearly brought out in the minutes of the Sub-Committee. In pursuance of the recommendations of the Sub-Committee, the State Governments have already been requested to have a representative of the River Valley Projects in the States of their respective Soil Conservation Boards and a model Bill for enactment of legislation or amendment to existing legislation for implementing soil conservation measures has already been circulated by this Ministry.

4- In the Second Five-Year Plan period, it is expected that there will be a provision of about Rs. 334 lakhs for the execution of soil conservation schemes in the River Valley Projects. Such Schemes are eligible for subsidies and loans in accordance with the general principles already communicated to the State Governments with this Ministry Express Letter No.F.3-13/55-Soil Cons., dated the 29th Feb.'56.

5- In view of the importance of the problems and the urgency of taking up such work particularly in the upper catchments of the rivers on which dams are under construction, the Government of India will be glad if action can be initiated immediately in the manner set forth in paragraph 2 above detailed schemes are formulated as suggested, for the consideration of the Govt. of India. While forwarding the schemes, it is requested that the latest available information regarding the soil conservation work done so far in such areas and that proposed to be done may also kindly be furnished.

6- The receipt of this letter may please be acklowledged.

(B.D. Kapur)
Under Secretary to the Govt. of India.

'Malhotra'

Encls: As above.
(with five spare copies)

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2) this Ministry's Express letter No.F.3-13/55-Soil Cons., dated the 29th Feb.'56, referred to in para 4 above.

BY ORDER

(B.D. ~~Kapur~~)
Under Secretary...

Report of the sub-committee on soil conservation in river valley projects.

A meeting of the sub-committee was held on 20th July '54. The following attended:-

1. Shri M.D. Mithal, Member (P.& I.)C.W.P.C.Chairman.
2. Shri K.K. Kartha, C.E.(PWD) Travancore-Cochin.
3. Shri A.L. Das, Deputy Chief Engineer, D.V.C.
4. Shri R.L. Khanna, Director Inspection and Control Bhakra Dam, Nangal Township.
5. Shri R.P. Verma, S.E., Hirakud Dam Project.
6. Shri P.R. Ahuja, S.E. In-charge of the Directorate of Hydrology & Statistics,C.W.P.C.

The Central Water & Power Commission has prepared a note bringing out the points for discussion on "Soil Conservation in River Valley Projects".

The items mentioned below are those included in the note "Points for discussion" prepared by the Committee of coordination of Engineers - 18-7-1954. The views of the Committee on these points are given below:-

Item No. I: In view of the fact that countrywide erosion surveys are essential for implementing effective soil conservation measures, by whom and how should these surveys may be conducted ?

The Sub-Committee feels that country-wide erosion surveys are essential for implementing effective soil conservation measures and that they should be carried out by the States concerned. The Sub-Committee understands that the States are forming Soil Conservation Boards for this purpose.

The assessment of the nature and extent of erosion can best be made by a rapid survey of the reconnaissance type by which major erosion affected areas are demarcated and the types and degrees of erosion in each area broadly indicated.

One or more areas of suitable size should be selected for work during the period of the plan.

Preference should be given in making this

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selection to areas, by catchments or sub-catchments, which are representative of much larger regions suffering from erosion so that the experience gained in these would be applicable to larger areas.

It will be the function of the Central Soil Conservation Board to standardise the scientific nomenclature survey techniques, etc. for these surveys.

Item No.2:- In as much as surveys of the entire catchment areas appear too huge to be undertaken in the near future, what type of pilot surveys should be conducted by the State Govts. and in what manner so as to draw inferences applicable to the entire catchment on the basis of small scale surveys ?

The pilot survey should include study of the soils, the slopes of the country as well as of the streams, the extent of the erosion, the vegetal cover, the present land use, silt content of streams and possible sites for check dams, livestock and agricultural practices and their contribution to erosion, hydro-meterological data and other relevant important information.

It is suggested for uniformity and completeness that the surveys be undertaken and details decided jointly by engineers, agriculturists and forest authorities in the area.

Item No.3:- What steps should the Central Soil Cons. Board take to institute research on problems of quantitative extent of silt reduction likely to result from different types of conservation measures ?

The Central Soil Conservation Board should plan Research-cum-Demonstration Centres in representative areas and correlate results in order to apply them to actual field conditions.

The Board should also encourage the states to carry out such works independently or through project authorities, in as many catchments as possible.

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Item No.4:- If the river valley project authorities have to play a role in the field of soil conservation, what exactly is the nature, scope and extent of this role ? Should the project administrations confine their attention only to such engineering measures as the construction of check dams or should their jurisdiction embrace other fields like setting up demonstration farms or afforestation, contour bunding etc. ? Do not the latter more appropriately belong to the jurisdiction of respective departments of the different State Govts. like Agriculture, Forests etc. ?

River Valley Project Administrations should have the responsibility to explore the possibilities for the construction of check dams above the proposed dam sites, as measures for silt reduction and, in consequence, prolongation of the useful like of the projects.

Provision should be made for the preparation of such schemes in the project estimates. If it is visualised that within the construction period of the project, construction of the check dams will be necessary with other major works of the project, then the provision for such of the works should also be made in the project estimate. Nevertheless all the schemes should be discussed in the project report.

The project authorities should help the State authorities in the preparation of overall plans for the soil conservation measures in the catchment areas upstream of dams.

In order to popularise soil conservation measures, it would be desirable for the project authorities to encourage demonstration farms for land use and afforestation in the catchment area. It is appropriate that funds for these activities should come from the 5-Year Plan as distinct from project estimates.

Item No.5:- What should be the basis and extent of the provision for soil conservation in the estimates of river valley projects ?

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Where construction of check dams is considered necessary within the construction period of the project, provision should be made in the project estimate at 5 to 10% of the cost of the main dam, without waiting for detailed survey and estimates of these check dams; but no work is to be undertaken without obtaining separate sanctions for each of the works.

Regarding afforestation and other soil conservation measures in culturable areas or areas to be made culturable, separate provisions should be made in the Five Year Plans not chargeable to the project.

Item No.6:- What has been done so far in river valley projects for implementing soil conservation measures and what remains to be done ?

Item No.7:- What have been the major difficulties experienced in the past which prevented a more vigorous implementation of conservation measures in river valley projects ?

As broadly indicated on pages 2 to 14 of the note on 'Soil Conservation river valley projects' circulated by the C.W.P.C., some work in this direction has already been initiated.

However, much remains to be done.

The difficulties have been, lack of funds, absence of detailed schemes, organization and legislation for control of land use i.e., restricting, grazing, jhuming, etc.

Item No.8:-What should be the agency for the execution of suitable soil conservation measures in

(a) State Projects;
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Item No.9:-What machinery is needed to ensure proper coordination and liaison between the soil conservation measures in river valley projects and those undertaken by the Central and State Govts. independent of them ?

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Item No.10:- What should be the responsibility between State Govts., Central and State Soil Cons. Board and the Project Administrations ?

In the case of state projects, the State Soil Conservation Boards will get the measures executed in collaboration with the river valley projects and the Comminity Project Administrations.

In the case of inter-state projects, the schemes will be prepared by the Project authorities but the work will be carried out by the State concerned under the general guidance of the Central Soil Conservation Board.

The States may use the project agencies for the execution of these measures by agreement.

During the period of execution of any river valley projects, check dams and other works in the stream would be carried out by the project authorities.

It is suggested that the State Soil Conservation Boards should include a representative of the river valley projects in that State.

The State Soil Cons. Boards will supply progress reports on various aspects of soil conservation measures to the Central Soil Conservation Board to ensure proper coordination and liaison between the soil conservation measures in the river valley projects and those undertaken by the Centra. & State Govts. independent of them.

Guidance will be given from time to time by the Central Soil Conservation Board to the State Soil Cons. Boards and project authorities, as and when considered necessary.

Item No. 11:- What legislation is necessary to ensure implementation of soil conservation measures by the State authorities ?

The Sub-committee has not before it the legislation bearing on soil conservation enacted by the various state authorities. Some states may have no such legislation. It will be necessary for each state to study the present

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conditions in this respect and to enact legislation necessary to ensure measures required for soil conservation and to enforce the same. These may include

1. Powers, where necessary, to enforce rotational closures to grazing, felling of trees etc.
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5. Carrying out works at the cost of the owners of land, where they fail to cooperate.

Item No.12:- The necessity of making community project authorities to undertake soil conservation measures alongwith their other activities.

It is recommanded that the Soil Conservation Boards may also impress the necessity of carrying out soil conservation measures on the Community Project Administrations in the areas being tackled by them.

SOIL CONSERVATION IN RIVER VALLEY PROJECTS.

SUMMARY

At the outset, the role of soil conservation in river valley projects is discussed, and it is pointed out that the importance of soil conservation, as far as river valley projects are concerned, arises out of the single but important benefit of reducing the sediment inflowinto reservoirs and like structures projected on rivers. The efforts so far made for initiating effective soil conservation measures in the Damodar Mahanadi, Kosi Bhakra, Nangal, Tawa, Tani, Mayurakshi and Chambal projects are briefly reviewed. The recommendations outlined in the 5-Year Plan in the field of soil conservation and the composition and the functions of the recently set up Central Soil Cons. Board are described.

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EXPRESS LETTER

No. F.21-52/55-Soil Cons.,
Government of India.,
Ministry of Food & Agriculture,

New Delhi, dated June '56.

GOVT. OF INDIA SECRETARIAT 15 JUN 1956

To

All the State Governments.

SUBJECT: SOIL CONSERVATION IN RIVER VALLEY PROJECTS.

The subject of soil conservation measures in river valley projects has been under the consideration of the Central Water & Power Commission since its inception and a certain amount of work has already been carried out in the river valley projects which have been executed or are under execution in the various States. Owing to the absence of a special organisation for the purpose, however, the work could not be undertaken by the Commission to the extent desired. The subject has been considered also by the Central Soil Conservation Board set up by the Ministry of Food & Agriculture and the Standing Committee of the Board on which the Commission is represented. In view of the fact that the formulation and execution of soil conservation schemes, including those in river valley projects, for under the Central Soil Cons. Board & that has already provided have been provided adequate funds for such work it is now considered necessary to demarcate clearly the respective functions of the River Valley Projects, the State Governments, the C.P.A. and the Central Soil Conservation Board in regard to this activity, in order that schemes for soil conservation in such projects are properly and expeditiously drawn up and executed.

2- The various problems involved in this connection and the manner in which they are to be tackled were considered at a meeting of the Sub-Committee on soil conservation in River Valley Projects under the C.W.P.C. in July '54. A copy of the report of the Sub-Committee, together with a copy of the Review prepared by the Commission for the Engineering Seminar held at Roorki in July '54, is enclosed for information. It will be observed that the following will be the broad lines on which action should be taken in connection with the formulation and execution of such schemes:

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3- The relative functions of the River Valley authorities the Community Project Administration, State Governments and the Central Soil Conservation Board have been clearly brought out in the minutes of the Sub-Committee. In pursuance of the recommendations of the Sub-Committee, the State Governments have already been requested to have a representative of the River Valley Projects in the States of their respective Soil Conservation Boards and a model Bill for enactment of legislation or amendment to existing legislation for implementing soil conservation measures has already been circulated by this Ministry.

4- In the Second Five-Year Plan period, it is expected that there will be a provision of about Rs. 334 lakhs for the execution of soil conservation schemes in the River Valley Projects. Such Schemes are eligible for subsidies and loans in accordance with the general principles already communicated to the State Governments with this Ministry Express Letter No.F.3-13/55-Soil Cons., dated the 29th Feb.'56.

5- In view of the importance of the problems and the urgency of taking up such work particularly in the upper catchments of the rivers on which dams are under construction, the Government of India will be glad if action can be initiated immediately in the manner set forth in paragraph 2 above detailed schemes are formulated as suggested, for the consideration of the Govt. of India. While forwarding the schemes, it is requested that the latest available information regarding the soil conservation work done so far in such areas and that proposed to be done may also kindly be furnished.

6- The receipt of this letter may please be acklowledged.

Yours faithfully,

(B.D. Kapur)
Under Secretary to the Govt. of India.

'Malhotra'

Encls: As above.
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SUMMARY

At the outset, the role of soil conservation in river valley projects is discussed, and it is pointed out that the importance of soil conservation, as far as river valley projects are concerned, arises out of the single but important benefit of reducing the sediment inflowinto reservoirs and like structures projected on rivers. The efforts so far made for initiating effective soil conservation measures in the Damodar Mahanadi, Kosi Bhakra, Nangal, Tawa, Tani, Mayurakshi and Chambal projects are briefly reviewed. The recommendations outlined in the 5-Year Plan in the field of soil conservation and the composition and the functions of the recently set up Central Soil Cons. Board are described.

In a discussion of the general aspects of the question, it is pointed out that finances for suitable schemes can be found in the project estimate of every river valley project or from out of the two crores provided in the current 5-Year Plan, lack of sufficient precision in the evaluation of the nature & magnitude of the problem and absence of quantitative conceptions about the possible reduction in the silt load of rivers consequential to the adoption of conservation measures are offered, among others, as possible reaons for the lack of desired progress in this field. The question of suitable agency for the execution of conservation measures is discussed and it is pointed out that only the construction of check dams for head water control should be considered the responsibility of engineering departments, while all other measures such as contour bunding, strip cropping , terracing, etc. should be viewed as developmental problems falling in the jurisdiction of other appropriate departments of the Central and State Govts.

Some defenite recommendations have been made towards the close of the paper, the more important of which are:-

i) country-wide erosion surveys should be initiated catchment-wise by the respective State Govts.

p.t.o.....

ii) pilot surveys should be started in large size catchments.

iii) Research on the quantitative aspects of the beneficial effects of soil conservation measures should be instituted.

iv) A lump sum provision should be made in each river valley project estimate; and,

v) importance should be attached not only to conservation in the upstream reaches above the dam but also lower down in the commanded area.

The chapter on soil conservation in the 5-Year Plan & Govt. of India Resolution setting up the Central Soil Conservation Board, the proceedings of the meeting of the Board and its Standing Committee held so far and a bibliography of Indian Literature on soil conservation are enclosed as appendices for facility of discussion.

.-.-.

GOVERNMENT SECRETARIAT
4-1222
12 JUN 1956

No.F.17-10/56-IS(VI)
Government of India
Ministry of Food & Agriculture
New Delhi, the 6th June, 1956.

....7

Shri R. Vengu,
Under Secy. to the Govt. of India.

To

All State Governments.

Sub:- RECOMMENDATION OF THE CONFERENCE OF STATE DIRECTORS OF ANIMAL HUSBANDRY HEID AT NEW DELHI ON THE 10TH AND 11TH FEBRUARY, 1956 - CONTOUR BUNDING.

Sir,

I am directed to say that a suggestion has been made that the Forest Department should undertake contour bunding while planting trees so that pastures could be developed simultaneously and the trees should be such as will provide leafy fodder and planted in such a way as will not damage the pastures. It is requested that this suggestion may be further taken up with the State Forest Department for necessary action and the progress made intimated to this Ministry in due course.

Yours faithfully,

(R. Vengu)
Under Secretary.

Copy to:-

1. All State Directors of Animal Husbandry.
2. I.G.F.

By order,

(R. Vengu)
Under Secretary.

'K'

Submitted for perusal. A copy may be forwarded to C.O.7. for remarks.

For perusal.

12/6/56

12/6/56

19.6.56.

14/6

14/6

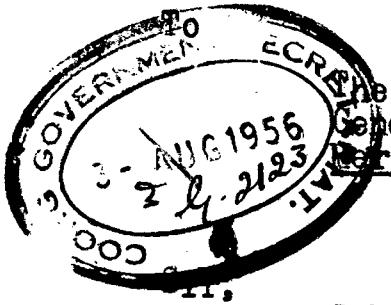
no. B. 3479
27-6-56

Copy forwarded to the C.O.T. for remarks.

DESPATCHED.

for Secy. to Govt.
of O.T.
21/6/56.

Ref.No.C-2-923/56
Office of the Conservator of Forests,
Coorg, Mercara, dated 31st July, 1956



To
The Secretary to the Government,
General Department - II,
Mercara.

Sub: Recommendations of the Conference of all State Directors of Animal Husbandry held at New Delhi on the 10th and 11th February, 1956 - Contour bunding.

Ref: Your letter No.B.3479, dated 7-6-1956.

....

There is no scope for the development of pasture within the reserved forests of this State. Further, adequate pasture is available in the reserved forests for the local cattle and as such it is not necessary to take any further action in this matter.

Yours faithfully,

for Conservator of Forests.

rao.1.8.

DESPATCHED No.B. 8206
Soils./56.

Mercara, dated 27 Sept. 1956

57

To

The Secretary to the Govt. of India,
Ministry of Food & Agriculture,
N E W D E L H I.

Sir,

Sub.:- Recommendation of the Conference of State Directors of Animal Husbandry held at New Delhi - Contour Bunding -
- - - -

I am directed to refer to your letter No. F.17-10/56-LS(VI) dated the 7th June 1956 on the above subject and to say that adequate pasture is already available within the reserved forests and so this State Govt. do not propose to undertake contour bunding for the Animal Husbandry purpose.

Kept. reserve Forest

Yours faithfully,

Secy. to the Govt.,
General Department II.

26/9/56

No. C-4 - 522 / 56

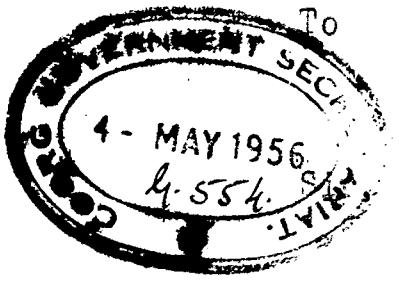
Office of the Conservator of Forests,
Coorg, Mercara, dated 30th April, 1956

From

The Conservator of Forests, Coorg,
Mercara.

To

The Chief Secretary to the Government of Coorg,
Mercara.



Sub: Afforestation of barren lands to prevent erosion.

Ref: Your letter No.B.1127/F.Dis.53/56, dated 27-4-1956.

Under the Second Five Year Plan, this Department has already submitted a scheme for the afforestation of the barren hill slopes in the Reserved Forests for a total estimated cost of Rs.5,54,000/-. Apart from the areas mentioned in this scheme, there are not other areas near the banks of rivers and streams which require to be afforested to prevent erosion.

Yours faithfully,

for Conservator of Forests.

Phone No. 32 9 DTT

61

COORG AGRICULTURAL DEPARTMENT

R. D. No. C.3. 861

POST BOX No. 9,

Mercara, Dated 7th May, 1956.

FROM

THE AGRICULTURAL OFFICER,

To

The Chief Secretary to Government of Coorg,

MERCARA.

Subject:— Afforestation of Barren lands to prevent erosion.

Ref:—

SIR,

Please refer to your endorsement No.D. 1127/R.Dis.53/56 dated 27th April, 1956.

I am to state that if sufficient fund is made available for the purpose, this work will be taken up.

Yours faithfully,

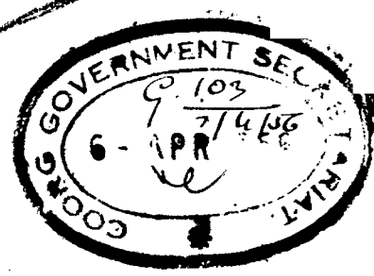
GOVERNMENT SECRETARIAT 4-626

for Agricultural Officer,
Coorg, Mercara.

5/5/56 S/S

Sub.

63



No.F. 21-134/55-Soil Cons.
Government of India,
Ministry of Food & Agriculture.

New Delhi, the 3rd April, 1956.

From

Shri B.D. Kapur,
Under Secretary to the Govt. of India.

To

All the State Governments.

SUBJECT:- AFFORESTATION OF BARREN LANDS TO PREVENT EROSION.

Sir,

I am directed to say that the question of afforestation of barren lands was examined in the last meeting of the Standing Committee of the Central Soil Conservation Board held on the 24th January, 1956. It was considered that as the consolidation of holdings is being undertaken in the States at present, it would be possible to set apart certain areas near the banks of rivers and streams to prevent erosion. It is, therefore, felt that steps may please be taken to afforest a strip of 100 yards width along the banks of rivers to prevent further river bank erosion.

Yours faithfully,

(B.D. Kapur)
Under Secretary to the Govt. of India.

J.M.L.
2.4.56.

.....

DESPATCHED no. B. 1127
R. Dis 53/56

Copy forwarded to C.O.7/AC/and
A.O for early remarks

Reminder to A.C. put up
Clk 17/7/56. 20/7/56

O/C 23/4/56
for Secy. to Govt. of India

Clk 20/4/56

This reference may be filed as it does not need a reply. Yes
Clk 23/8.
23/8.

COORG GOVERNMENT SECRETARIAT
9308
24 SEP 1956
To

65 ✓

From

The Accountant General,
Mysore, Bangalore.

To

The Secretary to Government
of Coorg, General Department II,
MERCARA.

No. 138/Wg/FAD II Station. Date. 19-9-56.

Fold along this line.

Sir,

Sub: Implementation of Soil Conservation Schemes during 1956-57 in the II Five Year Plan.

-:-

With reference to your Memo No.B.7255/R.Dis.53/56 dated 6-9-56, forwarding a copy of letter No. F.12-21/55-Soil Cons. dated 30-7-56 of the Under Secretary to the Government of India in the Ministry of Food and Agriculture, New Delhi, I request you to send a copy of that Ministry's letter No.F3.13/55 - Soil Cons. dated 29-2-56 as well as a copy of the appendix IV referred to therein for the information of this office. The particulars regarding the implementation of the scheme, the adjustment of the subsidy and the loan from the Government of India may also be furnished.

This may kindly be treated as urgent.

Yours faithfully,

Govindasami

(P.Govindasami)
Assistant Accounts Officer.

main file awaited.

3/10/9

Copy to the Under Secretary to the Government of India, Ministry of Food and Agriculture, New Delhi, for information.

O. I. G. S.

To

S. 185. (Large.)

FOLD HERE

FOLD HERE

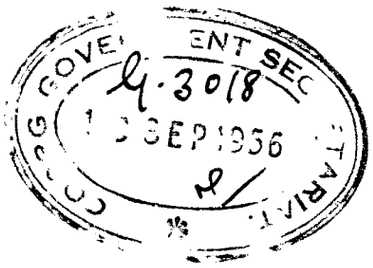
FOLD HERE

Telephone No. 32.

COORG AGRICULTURAL DEPARTMENT

67

No. 493.



Dated 17th Sept. 1956.
18

FROM

THE AGRICULTURAL OFFICER, COORG,
POST BOX NO. 9, MERCARA.

To

The Secretary to Government of Coorg
General Department, II,
M E R C A R A.

SIR,

Subject :— Please refer to your endorsement No. B. 7255/R. Dis. 53/56 dated the 6th September 1956.

****

With reference to the above, I have to state that so far as the ~~civil~~ Soil Conservation scheme of this Department is concerned, full grants were sought from the centre accordingly to rules applied to part 'C' States and no loans have been sought from them, but in letter No. F. 12 - 21/55 - Soil Cons, dated 30th July 1956 of the Under Secretary to the Government of India it is seen that out of the sanctioned amount of Rs. 80,000/- for 1956-57 a sum of Rs. 60,000/- has been sanctioned as loan. This may kindly be clarified.

I will not be in a position to implement the scheme till a suitable officer is appointed to be put in charge of the scheme.

Yours faithfully,

(B. S. Varadarajan)
AGRICULTURAL OFFICER
COORG, MERCARA.

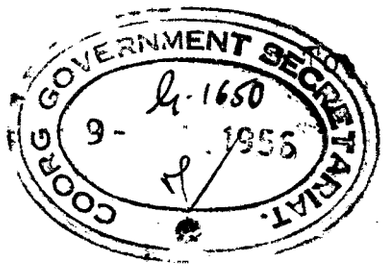
MSR
17/9/56.

12/9

Ref.No.C-1-401/53
Office of the Conservator of Forests,
Coorg, Mercara, dated 3rd July, 1956

From

The Conservator of Forests, Coorg,
Mercara.



The Secretary to the Government of Coorg,
General Department - II,
Mercara.

Sir,

Sub: Soil Conservation and River Valley Projects.

Ref: Letter No.F.21-52/55-Soil.Cons. Ministry of Food & Agriculture, Government of India, forwarded in your No.B.3427/R.Dis.53/56 dated 25-6-56.

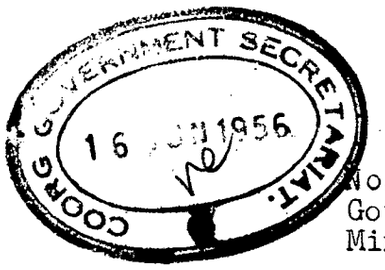
....

There are no River Valley Projects under execution in this State and hence the question of Soil Conservation in River Valley Projects does not arise. However, the subject of undertaking soil conservation work in other areas has been considered and necessary schemes in this regard have been submitted both by the Agriculture Department and the Forest Department under the Second Five Year Plan. So far as this Department is concerned, a sum of Rs.3 lakhs has been sanctioned under the Second Five Year Plan for the afforestation of barren hill slopes, as a soil conservation measure.

Letter No.F.21-52/55-Soil.Cons. from the Ministry of Food & Agriculture, Government of India, is herewith retransmitted.

Yours faithfully,
K.A. Bhoja Shetty
(K.A. BHOJA SHETTY)
Conservator of Forests.

rao.5.7.



EXPRESS LETTER

No. F.21-52/55-Soil Cons.,
Government of India.,
Ministry of Food & Agriculture,

New Delhi, dated June '56.

To

All the State Governments.

SUBJECT: SOIL CONSERVATION IN RIVER VALLEY PROJECTS.

The subject of soil conservation measures in river valley projects has been under the consideration of the Central Water & Power Commission since its inception and a certain amount of work has already been carried out in the river valley projects which have been executed or are under execution in the various States. Owing to the absence of a special organisation for the purpose, however, the work could not be undertaken by the Commission to the extent desired. The subject has been considered also by the Central Soil Conservation Board set up by the Ministry of Food & Agriculture and the Standing Committee of the Board on which the Commission is represented. In view of the fact that the formulation and execution of soil conservation schemes, including those in river valley projects, for under the Central Soil Cons.Board & that has already provided have been provided adequate funds for such work it is now considered necessary to demarcate clearly the respective functions of the River Valley Projects, the State Governments, the C.P.A. and the Central Soil Conservation Board in regard to this activity in order that schemes for soil conservation in such projects are properly and expeditiously drawn up and executed.

2- The various problems involved in this connection and the manner in which they are to be tackled were considered at a meeting of the Sub-Committee on soil conservation in River Valley Projects under the C.W.P.C. in July '54. A copy of the report of the Sub-Committee, together with a copy of the Review prepared by the Commission for the Engineering Seminar held at Roorki in July '54, is enclosed for information. It will be observed that the following will be the broad lines on which action should be taken in connection with the formulation and execution of such schemes:

P-two---

(i) It will be essential to undertake countrywide erosion surveys for implementing effective soil conservation measures. These surveys will be carried out by the States concerned or by the Central Soil Conservation Board through its own agency. The assessment of the nature and extent or erosion can best be made by a rapid survey of the reconnaisance type by which major erosion affected areas are demarcated and types and degrees of erosion in each area broadly indicated. One or more areas of suitable size should be selected for demonstration and development work, preference being given to the areas by catchments of sub-catchments which are representative of much larger regions suffering from erosion, so that the experience gained in these would be applicable to larger areas.

(ii) The above pilot survey should include study of the soils, the slopes of the country as well as the streams, the extent of the erosion, the vegetal cover, the present land use, the silt content of streams and possible sites for check-dams, livestock and agricultural practices and their contribution to erosion, hydro-metereological data and other relevant information.

(iii) With a view to ensuring uniformity and completeness, it would be necessary that the surveys be undertaken and details decided jointly by Engineers, Agriculturists and Forest Authorities in the area, keeping in view the data already available with different departments and with a view to avoid duplication of work.

(iv) The River Valley Project Administrations would explore the possibilities for the construction of check-dams above the dam sites as measures for silt reduction and, prolongation of the useful life of the projects. The provision for this will be met from the project estimates of that Administration.

p.t.o...

75

3- The relative functions of the River Valley authorities the Community Project Administration, State Governments and the Central Soil Conservation Board have been clearly brought out in the minutes of the Sub-Committee. In pursuance of the recommendations of the Sub-Committee, the State Governments have already been requested to have a representative of the River Valley Projects in the States of their respective Soil Conservation Boards and a model Bill for enactment of legislation or amendment to existing legislation for implementing soil conservation measures has already been circulated by this Ministry.

4- In the Second Five-Year Plan period, it is expected that there will be a provision of about Rs. 334 lakhs for the execution of soil conservation schemes in the River Valley Projects. Such Schemes are eligible for subsidies and loans in accordance with the general principles already communicated to the State Governments with this Ministry Express Letter No.F.3-13/55-Soil Cons., dated the 29th Feb.'56.

5- In view of the importance of the problems and the urgency of taking up such work particularly in the upper catchments of the rivers on which dams are under construction, the Government of India will be glad if action can be initiated immediately in the manner set forth in paragraph 2 above detailed schemes are formulated as suggested, for the consideration of the Govt. of India. While forwarding the schemes, it is requested that the latest available information regarding the soil conservation work done so far in such areas and that proposed to be done may also kindly be furnished.

6- The receipt of this letter may please be acklowledged.

Yours faithfully,

(B.D. Kapur)
Under Secretary to the Govt. of India.

'Malhotra'

Encls: As above.
(with five spare copies)

.....p.t.o.

Copy together with a copy of the following papers, forwarded to the Ministry of Irrigation & Power, with reference to their U.O.No.H-114(158), dated 27th Aug.'55:-

1) Model Bill referred to in para 3 above, and
2) this Ministry's Express letter No.F.3-13/55-Soil Cons., dated the 29th Feb.'56, referred to in para 4 above.

BY ORDER

(B.D. ~~Kapur~~)
Under Secretary...

No. B. 3427 Dt. 25-6-56.
R. Dis 53/56.

Forwarded to the Conservator of Forest, Coorg for remarks.

N. N. Ruddappa 25/6/56
for Secy to Govt. H.D.

CW
25/6/56

CONSERVATOR OF FORESTS, COORG.
C
26 JUN 1956
MERCARA.

77

Report of the sub-committee on soil conservation in river valley projects.

A meeting of the sub-committee was held on 20th July '54. The following attended:-

1. Shri M.D. Mithal, Member (P.& I.)C.W.P.C.Chairman.
2. Shri K.K. Kartha, C.E.(PWD) Travancore-Cochin.
3. Shri A.L. Das, Deputy Chief Engineer, D.V.C.
4. Shri R.L. Khanna, Director Inspection and Control Bhakra Dam, Nangal Township.
5. Shri R.P. Verma, S.E., Hirakud Dam Project.
6. Shri P.R. Ahuja, S.E. In-charge of the Directorate of Hydrology & Statistics,C.W.P.C.

The Central Water & Power Commission has prepared a note bringing out the points for discussion on "Soil Conservation in River Valley Projects".

The items mentioned below are those included in the note "Points for discussion" prepared by the Committee of coordination of Engineers - 18-7-1954. The views of the Committee on these points are given below:-

Item No.I: In view of the fact that countrywide erosion surveys are essential for implementing effective soil conservation measures, by whom and how should these surveys may be conducted ?

The Sub-Committee feels that country-wide erosion surveys are essential for implementing effective soil conservation measures and that they should be carried out by the States concerned. The Sub-Committee understands that the States are forming Soil Conservation Boards for this purpose.

The assessment of the nature and extent of erosion can best be made by a rapid survey of the reconnaissance type by which major erosion affected areas are demarcated and the types and degrees of erosion in each area broadly indicated.

One or more areas of suitable size should be selected for work during the period of the plan.

Preference should be given in making this

p;t; o.....

selection to areas, by catchments or sub-catchments, which are representative of much larger regions suffering from erosion so that the experience gained in these would be applicable to larger areas.

It will be the function of the Central Soil Conservation Board to standardise the scientific nomenclature survey techniques, etc. for these surveys.

Item No.2:- In as much as surveys of the entire catchment areas appear too huge to be undertaken in the near future, what type of pilot surveys should be conducted by the State Govts. and in what manner so as to draw inferences applicable to the entire catchment on the basis of small scale surveys ?

The pilot survey should include study of the soils, the slopes of the country as well as of the streams, the extent of the erosion, the vegetal cover, the present land use, silt content of streams and possible sites for check dams, livestock and agricultural practices and their contribution to erosion, hydro-meterological data and other relevant important information.

It is suggested for uniformity and completeness that the surveys be undertaken and details decided jointly by engineers, agriculturists and forest authorities in the area.

Item No.3:- What steps should the Central Soil Cons. Board take to institute research on problems of quantitative extent of silt reduction likely to result from different types of conservation measures ?

The Central Soil Conservation Board should plan Research-cum-Demonstration Centres in representative areas and correlate results in order to apply them to actual field conditions.

The Board should also encourage the states to carry out such works independently or through project authorities, in as many catchments as possible.

p.t.o.....

77

Item No.4:- If the river valley project authorities have to play a role in the field of soil conservation, what exactly is the nature, scope and extent of this role ? Should the project administrations confine their attention only to such engineering measures as the construction of check dams or should their jurisdiction embrace other fields like setting up demonstration farms or afforestation, contour bunding etc. ? Do not the latter more appropriately belong to the jurisdiction of respective departments of the different State Govts. like Agriculture, Forests etc. ?

River Valley Project Administrations should have the responsibility to explore the possibilities for the construction of check dams above the proposed dam sites, as measures for silt reduction and, in consequence, prolongation of the useful like of the projects.

Provision should be made for the preparation of such schemes in the project estimates. If it is visualised that within the construction period of the project, construction of the check dams will be necessary with other major works of the project, then the provision for such of the works should also be made in the project estimate. Nevertheless all the schemes should be discussed in the project report.

The project authorities should help the State authorities in the preparation of overall plans for the soil conservation measures in the catchment areas upstream of dams.

In order to popularise soil conservation measures, it would be desirable for the project authorities to encourage demonstration farms for land use and afforestation in the catchment area. It is appropriate that funds for these activities should come from the 5-Year Plan as distinct from project estimates.

Item No.5:- What should be the basis and extent of the provision for soil conservation in the estimates of river valley projects ?

p.t.o....

Where construction of check dams is considered necessary within the construction period of the project, provision should be made in the project estimate at 5 to 10% of the cost of the main dam, without waiting for detailed survey and estimates of these check dams; but no work is to be undertaken without obtaining separate sanctions for each of the works.

Regarding afforestation and other soil conservation measures in culturable areas or areas to be made culturable, separate provisions should be made in the Five Year Plans not chargeable to the project.

Item No.6:- What has been done so far in river valley projects for implementing soil conservation measures and what remains to be done ?

Item No.7:- What have been the major difficulties experienced in the past which prevented a more vigorous implementation of conservation measures in river valley projects ?

As broadly indicated on pages 2 to 14 of the note on 'Soil Conservation river valley projects' circulated by the C.W.P.C., some work in this direction has already been initiated.

However, much remains to be done.

The difficulties have been, lack of funds, absence of detailed schemes, organization and legislation for control of land use i.e., restricting, grazing, jhuming, etc.

Item No.8:-What should be the agency for the execution of suitable soil conservation measures in

(a) State Projects;
(b) Inter-state projects.

Item No.9:-What machinery is needed to ensure proper coordination and liaison between the soil conservation measures in river valley projects and those undertaken by the Central and State Govts. independent of them ?

p.t.o.....

Item No.10:- What should be the responsibility between State Govts., Central and State Soil Cons. Board and the Project Administrations ?

In the case of state projects, the State Soil Conservation Boards will get the measures executed in collaboration with the river valley projects and the Comminity Project Administrations.

In the case of inter-state projects, the schemes will be prepared by the Project authorities but the work will be carried out by the State concerned under the general guidance of the Central Soil Conservation Board.

The States may use the project agencies for the execution of these measures by agreement.

During the period of execution of any river valley projects, check dams and other works in the stream would be carried out by the project authorities.

It is suggested that the State Soil Conservation Boards should include a representative of the river valley projects in that State.

The State Soil Cons. Boards will supply progress reports on various aspects of soil conservation measures to the Central Soil Conservation Board to ensure proper coordination and liaison between the soil conservation measures in the river valley projects and those undertaken by the Centra. & State Govts. independent of them.

Guidance will be given from time to time by the Central Soil Conservation Board to the State Soil Cons. Boards and project authorities, as and when considered necessary.

Item No. 11:- What legislation is necessary to ensure implementation of soil conservation measures by the State authorities ?

The Sub-committee has not before it the legislation bearing on soil conservation enacted by the various state authorities. Some states may have no such legislation. It will be necessary for each state to study the present

p.t.o...

conditions in this respect and to enact legislation necessary to ensure measures required for soil conservation and to enforce the same. These may include

1. Powers, where necessary, to enforce rotational closures to grazing, felling of trees etc.
2. Crop rotation.
3. Contour bunding and terracing.
4. Afforestation and no cultivation beyond a certain slope.
5. Carrying out works at the cost of the owners of land, where they fail to cooperate.

Item No.12:- The necessity of making community project authorities to undertake soil conservation measures alongwith their other activities.

It is recommanded that the Soil Conservation Boards may also impress the necessity of carrying out soil conservation measures on the Community Project Administrations in the areas being tackled by them.

Telephone No. 32.

COORG AGRICULTURAL DEPARTMENT

No. 2585 Dated 8 : 10 : 1956

COORG GOVERNMENT SECRETARIAT
M-3393
9 - OCT 1956

FROM

THE AGRICULTURAL OFFICER, COORG,
POST BOX NO. 9, MERCARA.

TO

The Secretary to Government,
General Department, II,
M E R C A R A.

SIR,

Subject :— SOIL CONSERVATION.

Ref: Please refer to your endorsement No. 13/7382/ soil 56, dated 11th September 1956

With reference to the above, my remarks on subjects concerning this Department are as follows:

3(i) Research on grass is being carried out in this State for the purpose of introducing the promising types of grasses at Village centres for further multiplication and distribution among the ryots.

(ii) Demonstration units at three village centres for controlled grazing were opened in 1955-56, in collaboration with the farmers and under the Second Five Year Plan a rotational grazing unit with the assistance of the I.C.A.R. will be implemented.

(5) Agronomic Research in soil conservation can be taken up in this State after the implementation of soil conservation scheme under the Second Five Year Plan. Agronomic Research is also included in the Sprinkler Irrigation Unit to be implemented at Kudige under the Second Five Year Plan.

(7) The recommendations of the soil conservation Society of India are acceptable to this State.

Yours faithfully,

(B. S. Varadarajan)
AGRICULTURAL OFFICER
COORG, MERCARA.

MSR/6/10/

6/10 8/10/56

SOIL CONSERVATION IN RIVER VALLEY PROJECTS.

SUMMARY

At the outset, the role of soil conservation in river valley projects is discussed, and it is pointed out that the importance of soil conservation, as far as river valley projects are concerned, arises out of the single but important benefit of reducing the sediment inflowinto reservoirs and like structures projected on rivers. The efforts so far made for initiating effective soil conservation measures in the Damodar Mahanadi, Kosi Bhakra, Nangal, Tawa, Tani, Mayurakshi and Chambal projects are briefly reviewed. The recommendations outlined in the 5-Year Plan in the field of soil conservation and the composition and the functions of the recently set up Central Soil Cons. Board are described.

In a discussion of the general aspects of the question, it is pointed out that finances for suitable schemes can be found in the project estimate of every river valley project or from out of the two crores provided in the current 5-Year Plan, lack of sufficient precision in the evaluation of the nature & magnitude of the problem and absence of quantitative conceptions about the possible reduction in the silt load of rivers consequential to the adoption of conservation measures are offered, among others, as possible reaons for the lack of desired progress in this field. The question of suitable agency for the execution of conservation measures is discussed and it is pointed out that only the construction of check dams for head water control should be considered the responsibility of engineering departments, while all other measures such as contour bunding, strip cropping , terracing, etc. should be viewed as developmental problems falling in the jurisdiction of other appropriate departments of the Central and State Govts.

Some defenite recommendations have been made towards the close of the paper, the more important of which are:-

i) country-wide erosion surveys should be initiated catchment-wise by the respective State Govts.

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ii) pilot surveys should be started in large size catchments.

iii) Research on the quantitative aspects of the beneficial effects of soil conservation measures should be instituted.

iv) A lump sum provision should be made in each river valley project estimate; and,

v) importance should be attached not only to conservation in the upstream reaches above the dam but also lower down in the commanded area.

The chapter on soil conservation in the 5-Year Plan & Govt. of India Resolution setting up the Central Soil Conservation Board, the proceedings of the meeting of the Board and its Standing Committee held so far and a bibliography of Indian Literature on soil conservation are enclosed as appendices for facility of discussion.

COORG GOVERNMENT SECRETARIAT
G-1802
1956

EXPRESS LETTER

No.F.21-52/55-Soil Cons.,
Government of India.,
Ministry of Food & Agriculture,

New Delhi, dated July'56.

To

All the State Governments.

SUBJECT: SOIL CONSERVATION IN RIVER VALLEY PROJECTS.

Ref: Para 2 of this Ministry's Express letter No.F.21-52/55-Soil Cons. dated 6th June'56.

In order to facilitate examination of soil conservation schemes on a scientific basis, it is desired that the survey data should be collected according to a standard pattern. For this purpose, a detailed proforma has been devised a copy of which (with 10 spare copies) is enclosed. It is requested that while forwarding schemes for Soil Conservation in river valley Projects for the consideration of the Govt. of India, the information required in the proforma may also kindly be furnished.

(B.D. Kapur)
Under Secretary to the Govt. of India.

'Malhotra'
2/7/56..

Copy forwarded to the Ministry of Irrigation & Power, New Delhi.

BY ORDER.

(B.D. Kapur)
UNDER SECRETARY

Main Dte
I. & Valley

No. B. 5081
1-8-56.

Copy with a copy of the enclosure forwarded to A. O. Coorg / C. O. 7. Coorg for information. in continuation of this office endt. no B.3427/dt 25-6-56.

26/7/56
for Secy. to Govt.
A.D.A